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SANGUISORBA MINOR (ROSACEAE) ADVENTIVE IN TEXAS

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ABSTRACT

Sanguisorba minor is reported as occurring in Texas. A key to the two species of the genus now known in the state and comments on the distribution of each species in the USA are included. The invasive potential of the species is briefly mentioned.

KEY WORDS: Rosaceae, *Sanguisorba*, United States, Texas, adventive species.

The following specimen documents the occurrence of *Sanguisorba minor* as adventive and naturalized in the state of Texas.

TEXAS. Fannin Co.: From Honey Grove, 1.9 mi W of jct of Texas Hwy 34 and Texas Hwy 56 on Hwy 56, then 1.1 mi N of jct of FM 1396 and Hwy 56 on FM 1396, 19 Jun 2012, *Singhurst, Womack, Clark, & Warriner 19309* (BAYLU). Figure 1.

Sanguinsorba minor was located in a seepage transition between an upland prairie and the edge of a small reservoir (tank). Associated flora at the edge of the reservoir included *Juncus texanus*, *Eleocharis montevidensis, Lycopus americanus, Lythrum alatum, Eupatorium sp., Samolus parviflorus*, and *Pluchea odorata*. This aquatic system was located within an upland tallgrass prairie on clay soil over the Gober Chalk Geological Formation. The upland prairie was dominated by *Schizachyrium scoparium*, *Bouteloua curtipendula*, *Sporobolus compositis*, *Silphium laciniata*, *Baptisia australis*, *Dalea purpurea*, *D. compacta*, *Liatris squarrosa* var. *glabrata*, and *L. aestivalis*.

The species is a native or Eurasia (Fernald 1950), with the present Old World distribution being Europe, westward through central Asia to the Himalayas, northwest Africa and Libya (Hortipedia 2012). The species has been introduced to western USA (New Mexico to Montana and westward) and the northeast USA (Tennessee-North Carolina northward) (USDA, NRCS 2012). The origin of the species in Texas is apparently related to the use of the species as forage for livestock and wildlife (Carr & Smith 2010). In that work, *Sanguisorba minor* is specifically discussed as an agricultural crop but the article does not provide the standard botanical protocols for reporting additions to the flora of a state.

Sanguisorba minor is an early introduction to the United States, being mentioned as such by Torrey and Gray (1840) under the synonym *Poterium sanguisorba* L. Bailey (1949) described the status of the species as "somewhat nat.[uralized] in N. Amer." Gleason and Cronquist (1963) remarked that the species is "established as a weed along roadsides and in fields and in waste places here and there in our range" (northeast United States and adjacent Canada). Voss (1985), in the

Michigan Flora, mentioned "Despite the common names [Garden or Salad Burnet], this Old World species is apparently not cultivated to any extent in this country, but is a very local weed." As evaluated from the above comments, it does not appear that the species will present ecological problems in the state, other than not being a native part of the flora of Texas.

Several subspecific names are recognized in *Sanguisorba minor*. The Texas plants are nearest to *S. minor* subsp. *balearica* (Bourgeau ex Nyman) Muñoz, Garmendia, & C. Navarro.

Figure 1. *Sanguisorba minor* in Fannin County, Texas. Photo by Jason Singhurst, 19 June 2012.

This is the second species of *Sanguisorba* reported to occur in Texas, the other being *S. annua* (Nutt.) Nutt. The two species may be distinguished by use of the following key, which is modified from Radford et al. (1968).

1. Leaflets pectinately dissected nearly to midrib, segments about 1 mm wide, plants annual ..... **Sanguisorba annua**
1. Leaflets merely coarsely toothed, to ca. 7 mm wide; plants perennial ..... **Sanguisorba minor**

Sanguisorba annua is widely distributed in the western USA but sparingly so in the East, where USDA, NRCS (2012) cites its presence in South Carolina, Maryland, New York, and Massachusetts. In Texas the species exhibits an approximately triangular shaped distribution in the north central portion of the state, basically from Travis County northward to Fannin County, west to Wichita County and also Maverick County of the South Texas Plains (distribution determined from specimens cited in the Flora of Texas Database (2012) and specimens in the Baylor University Herbarium [BAYLU]).

There is no uniformity in the author citation of *Sanguisorba annua*. Diggs et al (1999) have used (Nutt. ex Hook.) Torr. & A.Gray, USDA,NRCS (2012) uses (Nutt. ex Hook) Nutt. ex Torr. & A.Gray, and the International Plant Names Index (2012) uses (Nutt.) Nutt., which we followed.

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